

**THE STOCK MARKET AND ITS ECONOMIC INTERACTIONS:**

**AN EMPIRICAL STUDY OF EGYPT**

**A Thesis Submitted to the College of Arts and Sciences, Universiti Utara Malaysia, in  
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of  
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By

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## ABSTRAK

Tesis ini mengkaji hubungan antara perkembangan pasaran modal dengan pertumbuhan ekonomi di Mesir. Selain itu, ia bertujuan untuk menentukan kewujudan kausaliti dan haluannya diantara perkembangan pasaran modal dengan pertumbuhan ekonomi. Penyelidikan ini juga menganalisis perilaku pasaran modal, khususnya reaksi terhadap krisis antarabangsa, iaitu peristiwa serangan pengganas Luxor, perang Iraq dan 11 September. Analisis ini menggunakan pembolehubah ekonomi asas, iaitu inflasi, kadar bunga, kadar tukaran, penawaran wang, defisit, dan keluaran dalam negara kasar. Kajian ini menggunakan data sukuan yang meliputi tempoh 1993:1 hingga 2008:4 yang merangkumi tiga insiden antarabangsa tersebut. Hubungan jangka panjang antara perkembangan pasaran saham dan pertumbuhan ekonomi diuji menggunakan ujian kointegrasi Johansen, diikuti dengan analisis dinamik jangka pendek yang berdasarkan model VECM; Sementara itu penentuan kausaliti antara pembolehubah ditentukan dengan menggunakan ujian kausaliti Granger. Ujian kointegrasi menunjukkan bahawa wujudnya hubungan jangka panjang yang positif diantara perkembangan pasaran saham dengan pertumbuhan ekonomi Mesir. Selain itu, hasil ujian juga menunjukkan hubungan yang positif dan kausaliti daripada pertumbuhan ekonomi dan pembangunan pasaran saham. Kajian ini juga meneliti hubungan antara ketidakpastian (volatiliti) pasaran saham dengan asas ekonomi menggunakan model *generalised autoregressive conditional heteroskedasticity* (GARCH). Dapatan kajian menunjukkan wujud hubungan antara volatiliti pasaran saham dengan keluaran dalam negara kasar, defisit, dan kadar bunga. Sementara itu, kajian keatas reaksi pasaran saham Mesir terhadap krisis dunia, iaitu peristiwa serangan pengganas Luxor, perang Iraq dan 11 September adalah menunjukkan reaksi yang berbeza sebelum dan selepas setiap krisis.

## **ABSTRACT**

This thesis investigates the relationship between stock market development and economic growth in Egypt. Its aim is to determine the direction of causality between stock market development and economic growth. This study also includes the analysis of stock market behaviour, in particular the response toward major international crisis namely the Luxor terrorist attack, Iraq war, and September 11. The analysis uses selected fundamental economic variables namely, inflation, interest rate, exchange rate, money supply, budget deficit, and gross domestic product and the data is analysed using quarterly data that covered the period between 1993:1 to 2008:4 which includes the above three international incidents. The existence of a long-run relationship between the stock market development and the economic growth is tested using Johansen's cointegration test, followed by the analysis of the short-run dynamic, which is based on the vector error correction model (VECM), while the determination of causality between variables is based on the Granger causality test. The result of the cointegration test shows the existence of the positive long-run relationship between the stock market development and economic growth in Egypt. It shows a positive relationship between economic growth and stock market development, while the causality is from economic growth to stock market development. Additionally, this thesis also examines the relationship between the stock market volatility and economic fundamentals using generalised autoregressive conditional heteroskedasticity (GARCH) model. The result shows the existence of relationship between stock market volatility with gross domestic product, government budget deficit, and interest rate. Finally, as for the reaction of the Egyptian stock market towards the world crisis namely Luxor terrorist attack, Iraq war and September 11, the results exhibit different reaction from the Egyptian stock market before and after the crisis.

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction**

Since the early 1990s, many developing countries have launched new markets or revitalized existing ones to enhance the development of capital markets and ease access to long-run capital. And it is well known that high volatility characterizes emerging stock markets. The objective of this study is to investigate the relationship between macroeconomic variables and the stock market volatility for the Egyptian stock market, and which macroeconomic variables are more important in causing major shifts in market volatility, since it is proven that long trend volatility should be associated with economic growth (Officer, 1973; and Schwert, 1989). This study also examines whether global, regional or local crises are causing market volatility or not.

The importance of the study on emerging equity markets is derived from at least three reasons: investments in emerging financial markets (EFMs) are viewed as the high-risk component of a global investment portfolio. As such, it is important for investors to understand the mix of benefits, and as pointed out by Chen, Roll, and Ross (1986) as well as McElroy and Burmeister (1988) and Hamao (1988), there is a relationship between macroeconomic variables and the stock prices. They also concluded that stock prices respond to macroeconomic news.

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